PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
36689.17		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/US2005/005461	17/02/2005	17/02/2004
Applicant		
UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language,** the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
      [ ] The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
   b. [X] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [X] **Certain claims were found unsearchable** (See Box II).

3. [ ] **Unity of invention is lacking** (see Box III).

4. With regard to the **title,**
   [X] the text is approved as submitted by the applicant.
   [ ] the text has been established by this Authority to read as follows:

5. With regard to the **abstract,**
   [X] the text is approved as submitted by the applicant.
   [ ] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings,**
   a. the figure of the **drawings** to be published with the abstract is Figure No. 1
      [ ] as suggested by the applicant.
      [X] as selected by this Authority, because the applicant failed to suggest a figure.
      [ ] as selected by this Authority, because this figure better characterizes the invention.
   b. [ ] none of the figures is to be published with the abstract.

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

   a. type of material

   [X] a sequence listing

   [ ] table(s) related to the sequence listing

   b. format of material

   [X] in written format

   [X] in computer readable form

   c. time of filing/furnishing

   [X] contained in the international application as filed

   [ ] filed together with the international application in computer readable form

   [X] furnished subsequently to this Authority for the purpose of search

2. [X] In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments:

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A. CLASSIFICATION OF SUBJECT MATTER
C12N15/869 C12N15/86 A61K48/00 C12N5/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/30707 A (UNIVERSITY COLLEGE LONDON; COFFIN, ROBERT, STUART; LATCHMAN, DAVID, SE) 16 July 1998 (1998-07-16) page 14 - page 16	1-71
X	PALMER J A ET AL: "Development and optimization of herpes simplex virus vectors for multiple long-term delivery to the peripheral nervous system" JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 74, no. 12, June 2000 (2000-06), pages 5604-5618, XP002164866 ISSN: 0022-538X cited in the application the whole document figure 5	1-71

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
21 July 2005	20/12/2005

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Heiduschat, C

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Form PCT/ISA/210 (second sheet) (January 2004)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	LACHMANN R H ET AL: "UTILIZATION OF THE HERPES SIMPLEX VIRUS TYPE 1 LATENCY-ASSOCIATED REGULATORY REGION TO DRIVE STABLE REPORTER GENE EXPRESSION IN THE NERVOUS SYSTEM" JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 71, no. 4, April 1997 (1997-04), pages 3197-3207, XP000654376 ISSN: 0022-538X the whole document figure 1	1-71
A	PERNG GUEY-CHUEN ET AL: "The spontaneous reactivation function of the herpes simplex virus type 1 LAT gene resides completely within the first 1.5 kilobases of the 8.3-kilobase primary transcript" JOURNAL OF VIROLOGY, vol. 70, no. 2, 1996, pages 976-984, XP002336979 ISSN: 0022-538X cited in the application page 982, right-hand column, last paragraph - page 983, left-hand column, last paragraph	1-71
A	WEST A G ET AL: "Insulators: Many functions, many mechanisms" GENES AND DEVELOPMENT, COLD SPRING HARBOR LABORATORY PRESS, NEW YORK, US, vol. 16, no. 3, 1 February 2002 (2002-02-01), pages 271-288, XP002249349 ISSN: 0890-9369 cited in the application the whole document	1-71
A	BERTHOMME HERVE ET AL: "Evidence for a bidirectional element located downstream from the herpes simple virus type 1 latency-associated promoter that increases its activity during latency" JOURNAL OF VIROLOGY, vol. 74, no. 8, April 2000 (2000-04), pages 3613-3622, XP002336980 ISSN: 0022-538X cited in the application page 3614	1-71

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	KUBAT NICOLE J ET AL: "The herpes simplex virus type 1 latency-associated transcript (LAT) enhancer/rcr is hyperacetylated during latency independently of LAT transcription" JOURNAL OF VIROLOGY, vol. 78, no. 22, November 2004 (2004-11), pages 12508-12518, XP002336981 ISSN: 0022-538X page 12516, right-hand column, paragraph 3	1-71
A	GLORIOSO J C ET AL: "DEVELOPMENT AND APPLICATION OF HERPES SIMPLEX VIRUS VECTORS FOR HUMAN GENE THERAPY" ANNUAL REVIEW OF MICROBIOLOGY, ANNUAL REVIEWS INC., PALO ALTO, CA, US, vol. 49, 1995, pages 675-710, XP000783620 ISSN: 0066-4227 page 685, last paragraph - page 687, paragraph 2; figure 3	1-71
A	US 2003/082142 A1 (COFFIN ROBERT STUART) 1 May 2003 (2003-05-01) the whole document figure 1	1-71

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [X] Claims Nos.: -
because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 71 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

2. [ ] Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. [ ] Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. [ ] As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. [ ] No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

[ ] The additional search fees were accompanied by the applicant's protest.

[ ] No protest accompanied the payment of additional search fees.

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Information on patent family members

International Application No
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9830707 A	16-07-1998	AT 267263 T	15-06-2004
		AU 749064 B2	20-06-2002
		AU 5566998 A	03-08-1998
		BR 9806866 A	18-04-2000
		CA 2278326 A1	16-07-1998
		CN 1250480 A	12-04-2000
		DE 69824027 D1	24-06-2004
		DE 69824027 T2	28-10-2004
		DK 1021553 T3	27-09-2004
		EP 1441033 A2	28-07-2004
		EP 1021553 A2	26-07-2000
		ES 2221980 T3	16-01-2005
		WO 9830707 A2	16-07-1998
		JP 2001508294 T	26-06-2001
		PT 1021553 T	30-09-2004
		US 2003219409 A1	27-11-2003
US 2003082142 A1	01-05-2003	AU 2017501 A	03-07-2001
		CA 2395576 A1	28-06-2001
		EP 1240344 A1	18-09-2002
		WO 0146449 A1	28-06-2001
		JP 2003518080 T	03-06-2003